

State Water Resources Control Board
Division of Water Rights

Tel: (916) 341-5300 Fax: (916) 341-5400

APPLICATION NO. 51736

2008 FEB -1 PM 2:52
WU CHINA TOWNS
SECURITY

1. APPLICANT/AGENT

	APPLICANT	ASSIGNED AGENT (if any)
Name	The Hess Collection Winery	Wagner & Bonsignore, CCE
	Veeder Hills Ranch	
Mailing Address	P.O. Box 4110	444 North Third Street Ste 325
City, State & Zip	Napa, CA 95448	Sacramento, CA 95811
Telephone	(707) 255-1144	(916) 441-6850
Fax		(916) 448-3866
E-mail		ryans@wagner-engrs.com

☐ Sole Owner ☐ Limited Liability Company (LLC) ☐ General Partnership*

☐ Limited Partnership* ☐ Business Trust ☐ Husband/Wife Co-Ownership

☒ Corporation ☐ Joint Venture ☐ Other _____

*Please identify the names, addresses and phone numbers of all partners.

3. **PROJECT DESCRIPTION** (Provide a detailed description of your project, including, but not limited to, type of construction activity, area to be graded or excavated, and how the water will be used.) Add additional pages if needed and check box below and label as an attachment.

[illegible]

☒ For continuation, see Attachment No. 1

4. PURPOSE OF USE, DIVERSION/STORAGE AMOUNT AND SEASON

a. PURPOSE OF USE (irrigation, domestic, etc.)	DIRECT DIVERSION				STORAGE		
	AMOUNT		SEASON OF DIVERSION		AMOUNT	SEASON OF COLLECTION	
	Rate (cfs or gpd)*	Acre-feet per annum	Beginning date (month & day)	Ending date (month & day)	Acre-feet per annum	Beginning date (month & day)	Ending date (month & day)
Irrigation					66	11-1	5-31
	Total afa			Total afa	66		

☐ See Attachment No. ____ * If rate is less than 0.025 cubic feet per second (cfs), use gallons per day (gpd).

b. Total combined amount taken by direct diversion and storage during any one year will be
66 acre-feet.

c. Reservoir storage is: ☒ onstream ☐ offstream ☐ underground (If underground storage, attach Underground Storage Form.)

d. County in which diversion is located: Napa County in which water will be used:
Napa

5. SOURCES AND POINTS OF DIVERSION/REDIVERSION

- a. Sources and Points of Diversion (POD)/Points of Rediversion (PORD):
- ☒ POD / ☐ PORD # unnamed stream tributary to Pickle Canyon thence tributary to Redwood Creek thence Napa Creek thence Napa River
 - ☒ POD / ☐ PORD # unnamed stream tributary to Pickle Canyon thence tributary to Redwood Creek thence Napa Creek thence Napa River
 - ☒ POD / ☐ PORD # Redwood Creek tributary to Napa Creek thence Napa River
 - ☐ POD / ☐ PORD # _____ tributary to _____ thence _____

If needed, attach additional pages, check box below and label attachment
☐ See Attachment No. ____

b. State Planar and Public Land Survey Coordinate Description:

POD/ PORD #	CALIFORNIA COORDINATES (NAD 83)	ZONE	POINT IS WITHIN (40-acre subdivision)	SECTION	TOWN- SHIP	RANGE	BASE AND MERIDIAN
			¼ of ¼				
			¼ of ¼				
			¼ of ¼				
			¼ of ¼				

If needed, attach additional pages, check box below and label attachment

☒ See Attachment No. 2

c. Name of the post office most often used by those living near the proposed point(s) of diversion:
Napa

6. WATER AVAILABILITY

- a. Have you attached a water availability analysis for this project? ☒ YES ☐ NO
If NO, provide sufficient information to demonstrate that there is reasonable likelihood that unappropriated water is available for the proposed appropriation: If needed, attach additional pages, check box below and label attachment.

☒ See Attachment No. 3

- b. Is your project located on a stream system declared to be fully appropriated by the State Water Resources Control Board (State Water Board) during your proposed season of diversion?
☐ YES ☐ NO
- c. In an average year, does the stream dry up at any point downstream of your project? ☒ YES ☐ NO
If YES, during which months? ☐ Jan ☐ Feb ☐ Mar ☐ Apr ☐ May ☒ Jun ☒ Jul ☒ Aug ☒ Sep ☐ Oct ☐ Nov ☐ Dec
- d. What alternate sources of water are available if a portion of your requested diversion season must be excluded because water is not available for appropriation? (e.g., percolating groundwater, purchased water, etc.) If needed, attach additional pages, check box below and label attachment
N/A

☐ See Attachment No.

7. PLACE OF USE

USE IS WITHIN (40-acre subdivision)	SECTION*	TOWNSHIP	RANGE	BASE & MERIDIAN	IF IRRIGATED	
					Acres	Presently cultivated?
1/4 of 1/4						<input type="checkbox"/> YES <input type="checkbox"/> NO
1/4 of 1/4						<input type="checkbox"/> YES <input type="checkbox"/> NO
1/4 of 1/4						<input type="checkbox"/> YES <input type="checkbox"/> NO
1/4 of 1/4						<input type="checkbox"/> YES <input type="checkbox"/> NO
1/4 of 1/4						<input type="checkbox"/> YES <input type="checkbox"/> NO
1/4 of 1/4						<input type="checkbox"/> YES <input type="checkbox"/> NO
1/4 of 1/4						<input type="checkbox"/> YES <input type="checkbox"/> NO
1/4 of 1/4						<input type="checkbox"/> YES <input type="checkbox"/> NO
Total Acres:						

*Please indicate if section is projected with a "(P)" following the section number.

☒ See Attachment No. 4 Please provide the Assessor's Parcel Number(s) for the place of use:
Napa County: 34-230-020

8. PROJECT SCHEDULE

- a. Project is: ☐ proposed. Year construction will begin:
☒ partially complete. Extent of completion: Place of use is fully developed. Reservoirs are existing but are proposed to be enlarged. Point of Diversion #3 is not yet built.
☐ complete. Year completed:
- b. Year of first use: 1973 Year water will be used to the full extent intended: 2018

9. JUSTIFICATION OF AMOUNTS REQUESTED

- a. ☒ IRRIGATION: Maximum area to be irrigated in any one year: 151 acres.

CROP	ACRES	METHOD OF IRRIGATION (sprinklers, flooding, etc.)	WATER USE (Acre-feet/Yr.)	SEASON OF WATER USE	
				Beginning date (month & day)	Ending date (month & day)
Vineyard	151	Drip Irrigation	66	4-15	11-1

☐ See Attachment No. ____

- b. ☐ DOMESTIC: Number of residences to be served: _____ Separately owned?
☐ YES ☐ NO Number of people to be served: _____ Estimated daily use per person is:
 _____ gallons per day Area of domestic lawns and gardens: _____ square feet
 Incidental domestic uses: _____

(dust control area, number and kind of domestic animals, etc.)

- c. ☐ STOCKWATERING: Kind of stock: _____ Maximum number: _____
 Describe type of operation: _____
 (feedlot, dairy, range, etc.)

- d. ☐ RECREATIONAL: Type of recreation: ☐ Fishing ☐ Swimming ☐ Boating ☐ Other _____

- e. ☐ MUNICIPAL:

POPULATION List for 5-year periods until use is completed		MAXIMUM MONTH		ANNUAL USE		
Period	Population	Average daily use (gallons per capita)	Rate of diversion (cfs)	Average daily use (gallons per capita)	Acre-foot (per capita)	Total (acre-feet)
Present						

☐ See Attachment No. ____

Month of maximum use during year: _____
 Month of minimum use during year: _____

- f. ☐ HEAT CONTROL: Area to be heat controlled: _____ net acres
 Type of crops protected: _____
 Rate at which water is applied to use: _____ gpm per acre
 Heat protection season will begin _____ and end _____
 (month and day) (month and day)

- g. ☐ FROST PROTECTION: Area to be frost protected: _____ net acres
 Type of crops protected: _____
 Rate at which water is applied to use: _____ gpm per acre
 The frost protection season will begin _____ and end _____
 (month & day) (month & day)

- h. ☐ INDUSTRIAL: Type of industry: _____
 Basis for determination of amount of water needed: _____

- i. ☐ MINING: Name of the claim: _____ ☐ Patented ☐ Unpatented

Nature of the mine: _____ Mineral(s) to be mined: _____

Type of milling or processing: _____ (watercourse)

After use, the water will be discharged into _____
in _____ 1/4 of _____ 1/4 of Section _____, T _____, R _____, B. & M. _____

- j. ☐ POWER: Total head to be utilized: _____ feet
Maximum flow through the penstock: _____ cfs Maximum theoretical horsepower capable of
being generated by the works (cfs x fall ÷ 8.8): _____
Electrical capacity (hp x 0.746 x efficiency): _____ kilowatts at: _____ % efficiency
After use, the water will be discharged into _____ (watercourse)
in _____ 1/4 of _____ 1/4 of Section _____, T _____, R _____, B&M. FERC No.: _____

- k. ☐ FISH AND WILDLIFE PRESERVATION AND/OR ENHANCEMENT: List specific species and
habitat type that will be preserved or enhanced: _____

- l. ☐ OTHER: Describe use: _____
Basis for determination of amount of water needed: _____

10. DIVERSION AND DISTRIBUTION METHOD #1 & #2

- a. Diversion will be by gravity by means of: Dams
(dam, pipe in unobstructed channel, pipe through dam, siphon, weir, gate, etc.)

- b. Diversion will be by pumping from: #3: offset well
(sump, offset well, channel, reservoir, etc)

Pump discharge rate: 3 ☒ cfs or ☐ gpd Horsepower: _____

Pump Efficiency: _____

- c. Conduit from diversion point to first lateral or to offstream storage reservoir:

CONDUIT (pipe or channel)	MATERIAL (type of pipe or channel lining; indicate if pipe is buried or not)	CROSS-SECTION (pipe diameter, or ditch depth and top and bottom width) (inches or feet)	LENGTH (feet)	TOTAL LIFT OR FALL		CAPACITY (cfs, gpd or gpm)
				feet	+ or -	
#1 to #2 Pipe	PVC	6"	1100'	40	-	2 CFS
#3 to #2 Pipe	PVC	10"	1400'	180	+	3 CFS

☐ See Attachment No. _____

- d. Storage reservoirs: (For underground storage, complete and attach underground storage form)

RESERVOIR NAME OR NUMBER	DAM				RESERVOIR		
	Vertical height from downstream toe of slope to spillway level (feet)	Construction material	Length (feet)	Freeboard: dam height above spillway crest (feet)	Surface area when full (acres)	Capacity (acre-feet)	Maximum water depth (feet)
1	38	Earth	250	2'	1.3	15	24
2	62.7	Earth	450	4'	3.13	51	33

☐ See Attachment No. _____

e. Outlet pipe: Complete for storage reservoirs having a capacity of 10 acre-feet or more.

RESERVOIR NAME OR NUMBER	OUTLET PIPE				
	Diameter in inches	Length in feet	Fall: Vertical distance between entrance and exit of outlet pipe in feet	Head: Vertical distance from spillway to entrance of outlet pipe in feet	Dead Storage: Storage below entrance of outlet pipe in acre-feet
1	Reservoir is existing, dewatering will be accomplished by pumping				
2	12	320	38' siphon	27'	3 af

☐ See Attachment No. ____

e. If water will be stored and the reservoir is not at the point of diversion, the maximum rate of diversion to off-stream storage will be 3 cfs. Diversion to offstream storage will be made by:

☒ Pumping ☐ Gravity

11. CONSERVATION AND MONITORING

a. What methods will you use to conserve water? Explain.

Drip Irrigation

b. How will you monitor your diversion to be sure you are within the limits of your water right and you are not wasting water? ☐ Weir ☐ Meter ☐ Periodic sampling ☒ Other (describe)

Reservoirs are existing onstream facilities. Water in storage will be determined by monthly measurements from staff gages in the reservoirs.

12. RIGHT OF ACCESS

a. Does the applicant own all the land where the water will be diverted, transported and used?

☒ YES ☐ NO

If NO, I ☐ do ☐ do not have a recorded easement or written authorization allowing me access.

b. List the names and mailing addresses of all affected landowners and state what steps are being taken to obtain access:

☐ See Attachment No. ____

13. EXISTING WATER RIGHTS AND RELATED FILINGS

a. Do you claim an existing right for the use of all or part of the water sought by this application?

☐ YES ☒ NO

If YES, please specify: ☐ Riparian ☐ Pre-1914 ☐ Registration ☐ Permit ☐ License

☐ Percolating groundwater ☐ Adjudicated ☐ Other (specify) _____

b. For each existing right claimed, state the source, year of first use, purpose, season and location of the point of diversion (to within quarter-quarter section). Include number of registration, permit, license, or statement of water diversion and use, if applicable.

☐ See Attachment No. ____

- c. List any related applications, registrations, permits, or licenses located in the proposed place of use or that utilize the same point(s) of diversion.

☐ See Attachment No. _____

14. OTHER SOURCES OF WATER

Are you presently using, or do you intend to use, purchased water or water supplied by contract in connection with this project? ☐ Yes ☒ No If yes, please explain: _____

15. MAP REQUIREMENTS

The Division cannot process your application without accurate information showing the source of water and location of water use. You must include a map with this application form that clearly indicates the quarter/quarter, section, township, range, and meridian of (1) the proposed points of diversion and (2) the place of use. A copy of a U.S.G.S. quadrangle/topographic map of your project area is preferred, and can be obtained from sporting goods stores or through the Internet at <http://topomaps.usgs.gov>. A certified engineering map is required when (1) appropriating more than three cubic feet per second by direct diversion, (2) constructing a dam which will be under the jurisdiction of the Division of Safety of Dams, (3) creating a reservoir with a surface area in excess of ten acres or (4) appropriating more than 1,000 acre-feet per annum by underground storage. See the instruction booklet for more information.

☒ See Attachment No. 5

ENVIRONMENTAL INFORMATION

Note: Before a water right permit may be issued for your project, the State Water Board must consider the information contained in an environmental document prepared in compliance with the California Environmental Quality Act (CEQA). This form is not a CEQA document. If a CEQA document has not yet been prepared for your project, a determination must be made of who is responsible for its preparation. If the State Water Board is determined to be responsible for preparing the CEQA document, the applicant will be required to pay all costs associated with the environmental evaluation and preparation of the required documents. Please answer the following questions to the best of your ability and submit with this application any studies that have been conducted regarding the environmental evaluation of your project.

16. COUNTY PERMITS

- a. Contact your county planning or public works department and provide the following information:

Person contacted: Terri Date of contact: 11-12-08
 Department: Napa County Planning Telephone: (707) 253-4416
 County Zoning Designation:
34-230-020: AW

Are any county permits required for your project? ☒ YES ☐ NO If YES, check appropriate box below:

☒ Grading permit ☐ Use permit ☐ Watercourse ☐ Obstruction permit ☐ Change of zoning
☐ General plan change ☐ Other (explain): _____

- b. Have you obtained any of the required permits described above? ☐ YES ☒ NO
 If YES, provide a complete copy of each permit obtained.

☐ See Attachment No. _____

17. STATE/FEDERAL PERMITS AND REQUIREMENTS

- a. Check any additional state or federal permits required for your project:

☐ Federal Energy Regulatory Commission ☐ U.S. Forest Service ☐ U.S. Bureau of Land Management ☒ U.S. Corps of Engineers ☐ U.S. Natural Res. Conservation Service ☒ Calif. Dept. of Fish and Game ☐ State Lands Commission ☒ Calif. Dept. of Water Resources (Div. of Safety of Dams) ☐ Calif. Coastal Commission ☐ State Reclamation Board ☐ Other (specify) _____

- b. For each agency from which a permit is required, provide the following information:

AGENCY	PERMIT TYPE	PERSON(S) CONTACTED	CONTACT DATE	TELEPHONE NO.

☒ See Attachment No. 6

- c. Does your proposed project involve any construction or grading-related activity that has significantly altered or would significantly alter the bed, bank, or riparian habitat of any stream or lake?
- ☒
- YES
- ☐
- NO

If YES, explain:

Enlargement of the two existing onstream reservoirs.

☐ See Attachment No. _____

- d. Have you contacted the California Department of Fish and Game concerning your project?
-
- ☐
- YES
- ☒
- NO If YES, name, telephone number and date of contact: _____

18. ENVIRONMENTAL DOCUMENT

- a. Has any California public agency prepared an environmental document for your project?

☐ YES ☒ NO

- b. If YES, submit a copy of the latest environmental document(s) prepared, including a copy of the notice of determination adopted by the California public agency. Public agency: _____

- c. If NO, check the appropriate box and explain below, if necessary:

☐ The applicant is a California public agency and will be preparing the environmental document.*
☒ I expect that the State Water Board will be preparing the environmental document.**
☐ I expect that a California public agency other than the State Water Board will be preparing the environmental document.* Public agency: _____
☐ See Attachment No. _____

* Note: When completed, submit a copy of the final environmental document (including notice of determination) or notice of exemption to the State Water Board, Division of Water Rights and proof of payment of the State Clearinghouse filing fee. Processing of your application cannot be completed until these documents are submitted.

** Note: CEQA requires that the State Water Board, as Lead Agency, prepare the environmental document. The information contained in the environmental document must be developed by the applicant and at the applicant's expense under the direction of the State Water Board, Division of Water Rights.

19. WASTE/WASTEWATER

- a. Will your project, during construction or operation, (1) generate waste or wastewater containing such things as sewage, industrial chemicals, metals, or agricultural chemicals, or (2) cause erosion, turbidity or sedimentation? ☐ YES ☒ NO
If YES, or you are unsure of your answer, explain below and contact your local Regional Water Quality Control Board for the following information (See instruction booklet for address and telephone no.):

☐ See Attachment No. ____

- b. Will a waste discharge permit be required for your project? ☐ YES ☒ NO
Person contacted: _____ Date of contact: _____
c. What method of treatment and disposal will be used? _____

☐ See Attachment No. ____

20. ARCHEOLOGY

- a. Have any archeological reports been prepared on this project? ☐ YES ☒ NO
b. Will you be preparing an archeological report to satisfy another public agency? ☐ YES ☒ NO
c. Do you know of any archeological or historic sites located within the general project area?
☐ YES ☒ NO If YES, explain:

☐ See Attachment No. ____

21. ENVIRONMENTAL SETTING

Attach two complete sets of color photographs, clearly dated and labeled, showing the vegetation that exists at the following three locations:

- ☒ Along the stream channel immediately downstream from the proposed point(s) of diversion.
☒ Along the stream channel immediately upstream from the proposed point(s) of diversion.
☒ At the place(s) where the water is to be used.
☒ See Attachment No. 7

SUBMITTAL FEES

Calculate your application filing fee using the "Water Right Fee Schedule Summary" that was enclosed in the application packet. The "Water Right Fee Schedule Summary" can also be viewed at the Division of Water Rights' website (www.waterrights.ca.gov).

A check for the application filing fee, payable to the "Division of Water Rights" and an \$850 check for the Streamflow Protection Standards review fee [Pub. Resources Code § 10005(a)], payable to the "California Department of Fish and Game," must accompany this application. All applicable fees are required at the time of filing. If the application fees are not received, your application will not be accepted and will be returned to you. Please check the fee schedule for any fee changes prior to submitting the application.

RECEIVED

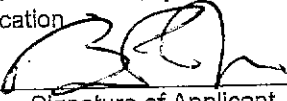
NOV 25 2008

WAGNER & BONSIGNORE

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DECLARATION AND SIGNATURE

I declare under penalty of perjury that all information provided is true and correct to the best of my knowledge and belief. I authorize my agent, if I have designated one above, to act on my behalf regarding this water right application.


Signature of Applicant

CHIEF FINANCIAL OFFICER
Title or Relationship

11/23/08
Date

Signature of Co-Applicant (if any)

Title or Relationship

Date

Applications that are not completely filled out and/or do not have the appropriate fees will not be accepted. In the event that the Division has to return the application because it is incomplete, a portion of the application submittal fee will be charged for the initial review.

'APPLICATION TO APPROPRIATE WATER' CHECKLIST

Before you submit your application, be sure to:

- ☐ Answer each question completely.
- ☐ Number, label and include all necessary attachments.
- ☐ Include a legible map that meets the requirements discussed in the instruction booklet.
- ☐ Include the Water Availability Analysis or sufficient information to demonstrate that there is reasonable likelihood that unappropriated water is available for the proposed appropriation.
- ☐ Include two complete sets of color photographs of the project site.
- ☐ Enclose a check for the required fee, payable to the Division of Water Rights.
- ☐ Enclose an \$850 check for the Streamflow Protection Standards review fee, payable to the Department of Fish and Game.
- ☐ Sign and date the application.

Send the original and one copy of the entire application to:

State Water Resources Control Board
Division of Water Rights
P.O. Box 2000
Sacramento, CA 95812-2000

Attachments to Accompany
Water Right Application
The Hess Collection Winery
Veeder Hills Ranch

Attachment #1

3. Project Description

This project consists of storage of 66 acre-feet of water in two existing onstream reservoirs. Reservoir #1 was built in the late 1960's and has a current capacity of 11.3 acre-feet; it is proposed to be enlarged to 15 acre-feet. Reservoir #2 was built in 1981 and has a current capacity of 28.7 acre-feet; it is proposed to be enlarged to 51 acre-feet. The reservoirs are located on separate adjacent unnamed streams which are both tributary to Pickle Canyon thence Redwood Creek thence Napa Creek thence Napa River. They currently store water from their naturally tributary areas. Water stored in Reservoir #2 is also supplemented by water diverted at Point of Diversion #1 through an existing 6" diameter pipe. The Applicant proposes to develop an offset well at Point of Diversion #3 on Redwood Creek to divert water to offstream storage in Reservoir #2.

Water will be used for irrigation of 151 acres of existing vineyard that was developed in the mid 1970's (see location on Attachment 5). The place of use is fully developed and no changes are requested pursuant to this Application.

Applicant will be making application to the Department of Water Resources, Division of Safety of Dams for approval of plans and specifications for Reservoir #2. Such application is expected to be submitted in early 2009.

Attachment #2

5.b. State Planar and Public Land Survey Coordinate Description

**Map
Point**

Description

- 1 Point of Diversion by Collection to Storage & Point of Diversion to offstream Storage at Reservoir #2: Located N.247,400 and E.1,890,850, California Coordinate System, Zone 2, NAD 27. Being within SW¼ of SE¼ of Section 23, T6N, R5W, MDB&M.
- 2 Point of Diversion by Collection to Storage & Point of Rediversion for water diverted at Points of Diversion #1 & #3: Located N.246,250 and E.1,891,050, California Coordinate System, Zone 2, NAD 27. Being within NW¼ of NE¼ of Section 26, T6N, R5W, MDB&M.
- 3 Point of Diversion to offstream Storage in Reservoir #2: Located N.245,300 and E.1,890,100, California Coordinate System, Zone 2, NAD 27. Being within SE¼ of NW¼ of Section 26, T6N, R5W, MDB&M.

Attachments to Accompany
Water Right Application
The Hess Collection Winery
Veeder Hills Ranch

Attachment #3

6. Water Availability

See separate attachment.

Attachment #4

7. Place of Use

<u>Use Within</u>	<u>Section</u>	<u>Township</u>	<u>Range</u>	<u>B. & M.</u>	<u>Acres</u>	<u>Previously Cultivated</u>
NE¼ of SE¼	22	T6N	R5W	M.D.	1	Yes
NW¼ of NW¼	23	T6N	R5W	M.D.	4	Yes
NE¼ of NW¼	23	T6N	R5W	M.D.	1	Yes
SW¼ of NW¼	23	T6N	R5W	M.D.	15	Yes
SE¼ of NW¼	23	T6N	R5W	M.D.	4	Yes
NW¼ of SW¼	23	T6N	R5W	M.D.	15	Yes
NE¼ of SW¼	23	T6N	R5W	M.D.	26	Yes
NW¼ of SE¼	23	T6N	R5W	M.D.	6	Yes
SW¼ of SW¼	23	T6N	R5W	M.D.	7	Yes
SE¼ of SW¼	23	T6N	R5W	M.D.	8	Yes
SW¼ of SE¼	23	T6N	R5W	M.D.	18	Yes
NW¼ of NW¼	26	T6N	R5W	M.D.	1	Yes
NE¼ of NW¼	26	T6N	R5W	M.D.	18	Yes
NW¼ of NE¼	26	T6N	R5W	M.D.	10	Yes
SE¼ of NW¼	26	T6N	R5W	M.D.	3	Yes
SW¼ of NE¼	26	T6N	R5W	M.D.	12	Yes
NW¼ of SE¼	26	T6N	R5W	M.D.	2	Yes
<i>Total</i>					151	

Attachment #5

6. Map

See separate attachment.

Attachments to Accompany
Water Right Application
The Hess Collection Winery
Veeder Hills Ranch

Attachment #6

17.b. State/Federal Permits and Requirements

Agency	Permit Type	Person Contacted	Contact Date	Telephone No.
Division of Safety of Dams	Approval of Plans and Specifications	John Wright	June 11, 2008	(916) 227-4627
California Department of Fish and Game	Lake and Streambed Alteration Agreement	Region III		(707) 944-5500
U.S. Corps of Engineers	401 Water Quality Certification	San Francisco District		(415) 503-6778

Attachment #7

12. Environmental Setting (Photographs)

See separate attachment.

ATTACHMENT 3

Estimate of Water Availability to Accompany Water Right Application by The Hess Collection - Veeder Hills Vineyards

California Water Code Section 1260(k) requires that every application for a permit to appropriate water shall include "sufficient information to demonstrate a reasonable likelihood that unappropriated water is available for the proposed appropriation." This narrative and accompanying calculations provide the required information.

The subject Application includes points of diversion (POD) on Redwood Creek and on two unnamed streams tributary to Pickle Canyon thence Redwood Creek thence Napa Creek thence the Napa River in Napa County (see attached map). According to State Water Resources Control Board Order WR 98-08, the San Francisco Bay watershed is fully appropriated from June 16 to August 31. The Application proposes a diversion season of November 1 to May 31, which conforms to Order WR 98-08. The following describes the methodology used to demonstrate a *reasonable* likelihood that water is physically available for the proposed appropriation.

The attached map shows the proposed points of diversion and the watershed areas tributary thereto. The map also shows lines of equal mean annual runoff as shown on the map included with the document entitled *Mean Annual Runoff in the San Francisco Bay Region, California, 1931-70* by S.E. Rantz, 1974.¹ An excerpt of this map is attached (Rantz map).

The weighted mean annual runoff for the watersheds tributary to POD 1 and POD 2 was computed based on the Rantz map. Mean *seasonal* runoff for the subject watersheds was estimated by adjusting the mean annual runoff assuming that the ratio of seasonal to annual runoff is identical to the ratio of seasonal to annual mean precipitation. The Napa State Hospital precipitation station was used for this purpose. The resulting seasonal runoff value was adjusted by deducting the *face value* of any senior water rights in the watershed above the proposed points of diversion.

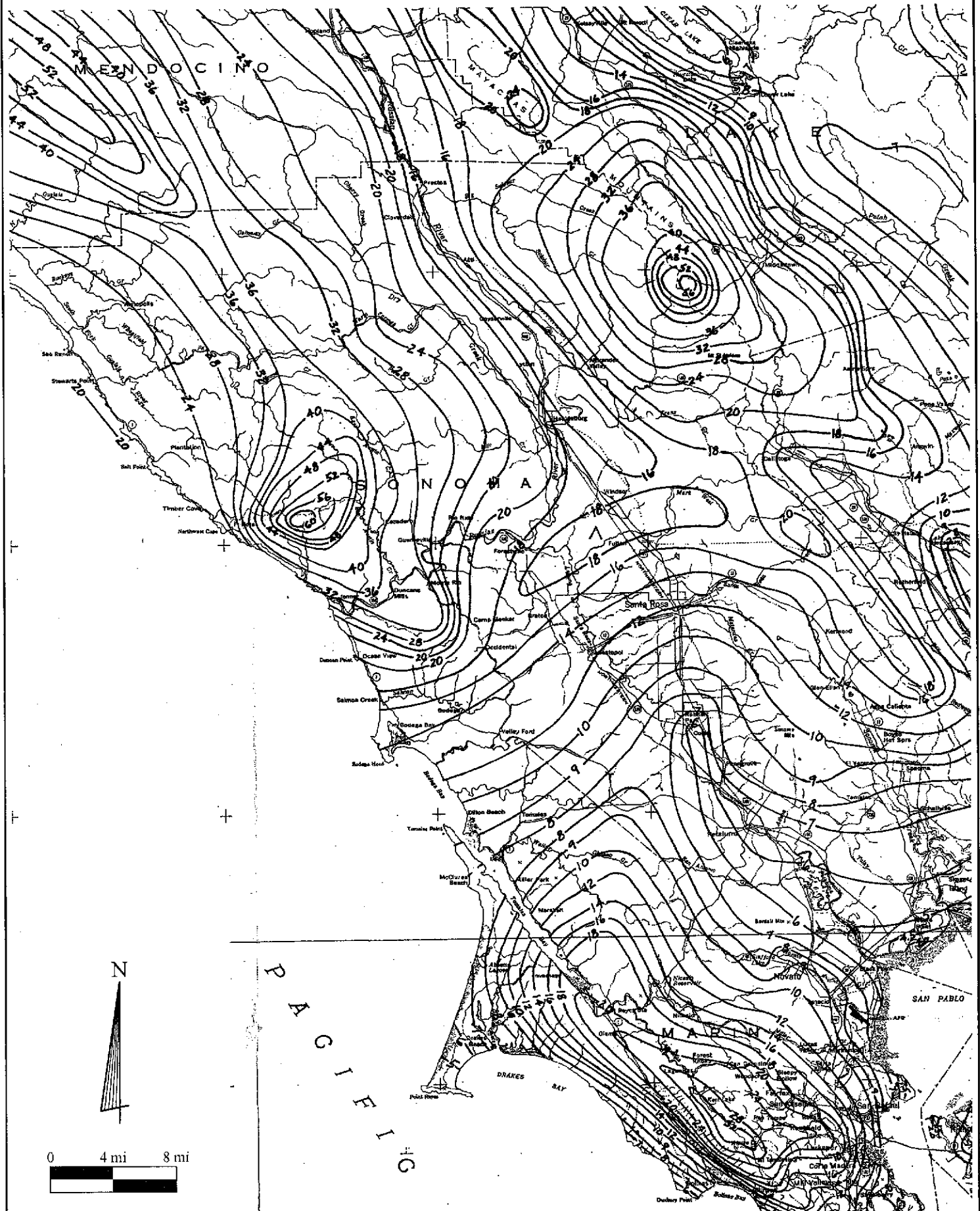
Calculations for the foregoing methodology are attached. These calculations show that in an average water year, approximately 70.3 acre-feet would accrue to POD #1. This would be ample to fill the 14.9 acre-foot reservoir at POD #1 and leave about 55.4 acre-feet of runoff remaining for potential redirection to POD #2. The calculations show that in an average water year, approximately 25.3 acre-feet would accrue to POD #2. Together with redirection of 25.1 acre-feet from POD #1, runoff collected at POD #2 would fill the reservoir at POD #2 in an average year and leave about 30.3 acre-feet of runoff remaining downstream of POD #1. Accordingly, it is reasonable to conclude that water is available for the subject Application.

¹ USGS Miscellaneous Field Studies Map MF-613, prepared in cooperation with the California Department of Water Resources.

In addition collection of tributary runoff at POD #1 and POD #2, an additional POD #3 is proposed on Redwood Creek for diversion to storage at POD #2. Based on historical records for USGS Gage #11458200 Redwood Creek Near Napa, the mean seasonal discharge at the gage is about 7,683 acre-feet, and the average monthly discharge gage during the proposed diversion season is about 18.3 cfs. The gage site is approximately 3.6 river miles downstream of POD #3. The watershed area tributary to POD #3 (4.98 square miles) is approximately 51 percent of the watershed area tributary to the USGS gage (9.79 square miles). Accordingly, a very simple proration would suggest that the seasonal flow at POD #3 would be about 3,900 acre-feet and the average monthly flow would be about 9.3 cfs. Previous water availability studies indicate that the Redwood Creek watershed is not highly developed for water diversions, therefore, water would be available for diversions at POD #3 to supplement runoff collected at PODs #1 and #2.²

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² See memorandum from Wagner & Bonsignore Consulting Civil Engineers to State Water Board dated March 20, 2007 regarding water availability for Application 30929 of Kirlin (now Crouse)



Mean Annual Runoff in the San Francisco Bay Region, California, 1931-70 (Miscellaneous Field Studies Map MF-613), by S.E. Rantz, 1974.

Water Right Application by Veeder Hills Vineyard

Estimate of Water Availability

Points of Diversion #1 & #2

Monthly Precipitation⁽¹⁾

NAPA STATE HOSPITAL, CALIFORNIA

<u>Month</u>	<u>Mean Precipitation (in)</u>	
October	1.39	
November	3.04	
December	4.59	
January	4.87	
February	4.55	
March	3.33	
April	1.65	
May	0.70	
June	0.23	
July	0.02	
August	0.08	
September	<u>0.28</u>	
Annual	24.71	

	POD #1	POD #2
Mean precipitation for requested diversion season (11/1 - 5/31):	22.72	22.72 in
Precipitation during requested diversion season as a percentage of total precipitation:	91.95%	91.95%
Mean Annual Runoff: ⁽²⁾	12.8	12.5 in
Estimated Mean Seasonal Runoff: ⁽³⁾	11.7	11.4 in
Watershed Area for PODs #1 and #2:	72.1	26.6 ac
Total Estimated Mean Seasonal Runoff at PODs #1 & #2:	70.3	25.3 ac-ft
Senior Diverters of Record within PODs #1 & #2 watershed:	n/a	n/a
Total water available:	70.3	25.3 ac-ft

Notes:

⁽¹⁾ Source: Western Regional Climate Center website, <http://www.wrcc.dri.edu/summary/climsnmc.html>

⁽²⁾ *Mean Annual Runoff in the San Francisco Bay Region, California, 1931-70 (Miscellaneous Field Studies Map MF-613)*, by S.E. Rantz, 1974.

⁽³⁾ Estimated mean seasonal runoff is computed by multiplying mean annual runoff by percent seasonal precipitation.

**The Hess Collection
Veeder Hills Vineyards**

11/17/2008

USGS 11458200 REDWOOD C NR NAPA CA

Water Year	Monthly Mean Discharge (cfs)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1958	0.00	0.00	0.13	7.52	29.30	3.23	0.95	0.19	0.02	0.00	0.00	1.55
1959	0.10	0.00	0.14	4.96	34.60	17.70	2.34	1.03	0.22	0.01	0.00	0.00
1960	0.00	0.33	2.91	6.91	10.10	12.70	3.09	0.98	0.14	0.01	0.07	0.09
1961	0.00	0.22	4.56	8.70	56.20	31.30	3.77	0.99	0.15	0.00	0.00	0.00
1962	20.20	1.15	14.10	36.70	43.60	24.10	55.20	8.43	2.33	0.42	0.06	0.02
1963	0.57	11.40	1.73	26.70	3.25	2.22	1.03	0.52	0.20	0.03	0.20	0.41
1964	0.19	2.73	52.90	55.50	7.28	2.37	21.40	3.19	0.64	0.18	0.14	0.05
1965	0.18	2.91	5.63	54.50	20.00	6.99	2.43	1.13	0.31	0.02	0.00	0.00
1966	0.00	12.60	30.10	98.80	18.80	30.80	49.30	9.01	7.19	1.07	0.23	0.04
1967	0.05	0.24	1.70	17.80	24.50	23.60	1.37	0.25	0.13	0.01	0.00	0.00
1968	0.15	3.02	26.10	109.60	88.20	25.50	7.98	2.71	0.89	0.19	0.00	0.00
1969	0.11	0.49	45.80	176.50	28.90	15.50	2.95	1.06	0.37	0.05	0.00	0.00
1970	0.02	18.10	66.80	18.10	3.90	12.00	5.60	1.66	0.46	0.12	0.00	0.00
1971	0.00	0.28	2.82	5.02	6.62	2.55	1.60	0.25	0.02	0.01	0.00	0.00
1972	0.63	11.80	11.10	83.40	61.10	31.20	6.70	0.89	0.18	0.02	0.00	0.00
Monthly Average	1.48	4.35	17.77	47.38	29.09	16.12	11.05	2.15	0.88	0.14	0.05	0.14

Source: USGS Surface-Water Data for California - <http://waterdata.usgs.gov/ca/nwis/sw>

The Hess Collection
Veeder Hills Vineyards

USGS 11458200 REDWOOD C NR NAPA CA

Water Year	Monthly Mean Discharge (af)												Annual Total
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	
1958	0	0	8	462	1,627	199	57	11	1	0	0	92	2,458
1959	6	0	8	305	1,922	1,088	139	63	13	0	0	0	3,546
1960	0	19	179	425	581	781	184	60	9	0	4	6	2,248
1961	0	13	280	535	3,121	1,925	224	61	9	0	0	0	6,168
1962	1,242	68	867	2,257	2,421	1,482	3,285	518	139	26	4	1	12,309
1963	35	678	106	1,642	180	137	61	32	12	2	12	24	2,922
1964	12	162	3,253	3,413	419	146	1,273	196	38	11	8	3	8,934
1965	11	173	346	3,351	1,111	430	145	69	19	1	0	0	5,656
1966	0	750	1,851	6,075	1,044	1,894	2,934	554	428	66	14	2	15,611
1967	3	14	105	1,094	1,361	1,451	82	15	8	0	0	0	4,133
1968	9	180	1,605	6,739	5,073	1,568	475	167	53	11	0	0	15,880
1969	7	29	2,816	10,853	1,605	953	176	65	22	3	0	0	16,528
1970	1	1,077	4,107	1,113	217	738	333	102	27	7	0	0	7,723
1971	0	17	173	309	368	157	95	15	1	0	0	0	1,135
1972	38	702	683	5,128	3,515	1,918	399	55	11	1	0	0	12,450
Monthly Average	91	259	1,092	2,913	1,638	991	657	132	53	9	3	9	7,847

Source: USGS Surface-Water Data for California - <http://waterdata.usgs.gov/ca/nwis/sw>